

IN THE CLAIMS:

Please amend the claims as follows: (A copy of a marked up version with markings to show changes made is attached hereto.)

1. (Amended) A vehicle data bus system comprising:

a data bus which connects a plurality of bus users in data communication with one another; and

locating apparatus, including a locating module connected as one of the bus users and configured to receive wheel speed data and to acquire vehicle position data, direction of travel angle data and travel speed data and to output this acquired data onto the data bus; wherein,

the locating module has a locating computing unit and a locating sensor system which comprises at least a GPS receiver with associated GPS antenna and gyro data-determining means;

the locating module is configured to receive wheel speed data via the data bus;

the locating module is further configured to receive forward/backward direction of travel data via the data bus, and to acquire

altitude position data and to output acquired altitude position data onto the data bus; and

the gyro data-determining means comprises one of gyro data-sensing means in the form of a gyroscope, and means for the bus-end reception and evaluation of gyro data of a travel dynamics/traction control system.

2. (Amended) The vehicle data bus system according to Claim 1, further comprising means for providing location precision classification information which indicates a degree of unreliability of calculated position data.

3. (Amended) The vehicle data bus system according to Claim 2, wherein the locating precision classification is output onto the data bus.

4. (Amended) The vehicle data bus system according to Claim 1, wherein the locating module contains an integrated GPS antenna.

5. (Amended) The vehicle data bus system according to Claim 1, further comprising an additional bus user in the form of a navigation unit, which receives vehicle position data from the locating module via the data bus, and by means of a map-matching process acquires position correction data which it inputs into the data bus in order to feed it back to the locating module.

6. (Amended) The vehicle data bus system according to Claim 5, wherein the navigation unit determines a corrected, precise vehicle position with a new locating precision classification and outputs it onto the data bus.

7. (Amended) The vehicle data bus system according to Claim 5, wherein the navigation unit determines accompanying travel network information and outputs it onto the data bus.

8. (Amended) The vehicle data bus system according to Claim 1, wherein at least one telematics service unit is provided as a further bus user which uses data acquired from the locating module or the navigation unit.

9. (Amended) The vehicle data bus system according to Claim 1, further comprising an additional bus user in the form of an engine and/or gearbox control unit, uses altitude position data acquired from the locating module.

10. (Amended) The vehicle data bus system according to Claim 1, wherein:

the locating module is part of a further bus user; and

the locating computing unit is used by the further bus user, for additional tasks.
